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DATE: Wednesday, January 26, 2005

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		DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR	
☐	L7	(groves-john$.in.)	55
☐	L6	(groves-john$.in.)	55
☐	L5	(bilayer and $array same (cell$ near5 adhes$))	32
☐	L4	(bilayer and $array same (cell$ near5 adhes$))	32
		DB=USPT; PLUR=YES; OP=OR	
☐	L3	($array same (cell$ near5 adhes$))	234
		DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR	
☐	L2	($array same (cell$ near5 adhes$) and lipid near5 membrane)	28
☐	L1	($array same (cell$ near5 adhes$))	591

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NEWS	8	DEC 15	MEDLINE update schedule for December 2004
NEWS	9	DEC 17	ELCOM reloaded; updating to resume; current-awareness alerts (SDIs) affected
NEWS	10	DEC 17	COMPUAB reloaded; updating to resume; current-awareness alerts (SDIs) affected
NEWS	11	DEC 17	SOLIDSTATE reloaded; updating to resume; current-awareness alerts (SDIs) affected
NEWS	12	DEC 17	CERAB reloaded; updating to resume; current-awareness alerts (SDIs) affected
NEWS	13	DEC 17	THREE NEW FIELDS ADDED TO IFIPAT/IFIUDB/IFICDB
NEWS	14	DEC 30	EPFULL: New patent full text database to be available on STN
NEWS	15	DEC 30	CAPLUS - PATENT COVERAGE EXPANDED
NEWS	16	JAN 03	No connect-hour charges in EPFULL during January and February 2005
NEWS	17	JAN 26	CA/CAPLUS - Expanded patent coverage to include the Russian Agency for Patents and Trademarks (ROSPATENT)

NEWS EXPRESS	JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005
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FILE 'WPIDS' ENTERED AT 19:26:32 ON 26 JAN 2005
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=> bilayer and ?array and (cell? (s) adhes?)
   4 FILES SEARCHED...
L1   10 BILAYER AND ?ARRAY AND (CELL? (S) ADHES?)

=> dup rem l1
PROCESSING COMPLETED FOR L1
L2   7 DUP REM L1 (3 DUPLICATES REMOVED)

=> t ti l2 1-7

L2   ANSWER 1 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN
TI   Biosensors for single cell and multi cell analysis

L2   ANSWER 2 OF 7 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
TI   Drug discovery process for identifying a ligand that is able to bind to a
     biological target molecule comprises measuring an effect resulting from
     signal transduction process relating to the target molecule and downstream
     effector molecules.

L2   ANSWER 3 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN
TI   Lectin and neurotoxin interactions with glycolipid membranes as monitored
     by liposome leakage studies

L2   ANSWER 4 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1
TI   Gene expression analysis in microorganism using adhesion to lipid
     bilayer

L2   ANSWER 5 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 2
TI   Modulation of **cellular adhesion** with lipid membrane
     micro-arrays

L2   ANSWER 6 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 3
TI   Lipid **bilayer array** methods and devices

L2   ANSWER 7 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN
TI   Spatially-addressed lipid **bilayer** arrays and lipid bilayers with
     addressable confined aqueous compartments

=> bilayer and ?array and cell? and adhes?
   4 FILES SEARCHED...
L3   13 BILAYER AND ?ARRAY AND CELL? AND ADHES?

=> dup rem l3
PROCESSING COMPLETED FOR L3
L4   10 DUP REM L3 (3 DUPLICATES REMOVED)

=> t ti l4 1-10

L4   ANSWER 1 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
TI   Polypeptide immobilization with reactant ligands to make protein chips

L4   ANSWER 2 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
TI   Biosensors for single **cell** and multi **cell** analysis

L4   ANSWER 3 OF 10 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
TI   Drug discovery process for identifying a ligand that is able to bind to a
     biological target molecule comprises measuring an effect resulting from
     signal transduction process relating to the target molecule and downstream
     effector molecules.

L4   ANSWER 4 OF 10 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
TI   Capacitor structure fabrication method e.g. for dynamic random access
     memory, involves forming **bilayer** barrier comprising metal layer
     and metal nitride layer upon upper capacitor plate.

L4   ANSWER 5 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
TI   Lectin and neurotoxin interactions with glycolipid membranes as monitored
     by liposome leakage studies

L4   ANSWER 6 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1
TI   Gene expression analysis in microorganism using **adhesion** to
     lipid **bilayer**

L4   ANSWER 7 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 2
TI   Modulation of **cellular adhesion** with lipid membrane
     micro-arrays

L4   ANSWER 8 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 3
TI   Lipid **bilayer array** methods and devices

L4   ANSWER 9 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
TI   Spatially-addressed lipid **bilayer** arrays and lipid bilayers with
     addressable confined aqueous compartments

L4   ANSWER 10 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
TI   Rough charged solid phase for attachment of biomolecules

=> l2 not l4
L5   0 L2 NOT L4

=> d ibib abs l4 1-10

L4   ANSWER 1 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:492546 CAPLUS
DOCUMENT NUMBER: 139:65762
TITLE: Polypeptide immobilization with reactant ligands to
                          make protein chips
INVENTOR(S):   Mrksich, Milan; Hodneland, Christian
PATENT ASSIGNEE(S):   USA

SOURCE: U.S. Pat. Appl. Publ., 57 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003119054	A1	20030626	US 2001-923760	20010807
WO 2003097792	A2	20031127	WO 2002-US25026	20020807

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-923760 A 20010807
OTHER SOURCE(S): MARPAT 139:65762
AB A substrate comprises a surface, and a plurality of moieties, on at least a portion of the surface. The moieties are moieties of formula: Surf-L-Q-T; where T comprises a reactant ligand, and Surf designates where the moiety attaches to the surface. The substrate can be made into a protein chip by the reaction of a reactant ligand and a fusion polypeptide, where the fusion polypeptide includes a capture polypeptide moiety which corresponds to the reactant ligand. Glutathione-S-transferase-hemagglutinin A fusion protein was immobilized on gold-coated surfaces having self-assembled monolayers of a hydroquinone-glutathione-EG5-alkanethiol (preparation given; as immobilizable reactant ligand for GST) and an alkanethiol terminated in penta(ethylene glycol) (for prevention of nonspecific adsorption of protein).

L4 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:435211 CAPLUS
DOCUMENT NUMBER: 138:398419
TITLE: Biosensors for single **cell** and multi **cell** analysis
INVENTOR(S): Freeman, Alex R.; Wilk-Blaszczak, Malgosia
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 21 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003104512	A1	20030605	US 2001-13017	20011130

PRIORITY APPLN. INFO.: US 2001-13017 20011130
AB The present invention relates to a structure comprising a biol. membrane and substrate with fluidic network, an **array** of membranes and an **array** of fluidic networks in substrate, a high throughput screen, methods for production of the membrane, substrate structure, and a method for interconnected **array** of substrate structures and a method for attaching membranes to structure, a method to elec. record events from the membranes and a method to screen large compound library using the **array**. More particularly, it relates to biol. **cells** and

artificial **cell** membranes adhered to the substrate with a high elec. resistivity seal, a method to manufacture **array** configuration of such substrates, and a method to screen compds. using the membrane receptors such as ion-channels, ion pumps, & receptors.

L4 ANSWER 3 OF 10 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
ACCESSION NUMBER: 2003-636632 [60] WPIDS
CROSS REFERENCE: 2003-569432 [53]
DOC. NO. NON-CPI: N2003-506450
DOC. NO. CPI: C2003-174023
TITLE: Drug discovery process for identifying a ligand that is able to bind to a biological target molecule comprises measuring an effect resulting from signal transduction process relating to the target molecule and downstream effector molecules.
DERWENT CLASS: B04 D16 S03
INVENTOR(S): HEYDORN, A; JORGENSEN, R; LANGE, B H; SCHWARTZ, T W
PATENT ASSIGNEE(S): (SEVE-N) 7TM PHARMA AS
COUNTRY COUNT: 102
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2003056329	A2	20030710	(200360)*	EN	117
RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SI SK SL SZ TR TZ UG ZM ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW					
AU 2002357449	A1	20030715	(200421)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003056329	A2	WO 2002-DK901	20021220
AU 2002357449	A1	AU 2002-357449	20021220

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2002357449	A1 Based on	WO 2003056329

PRIORITY APPLN. INFO: DK 2001-1944 20011221
AN 2003-636632 [60] WPIDS
CR 2003-569432 [53]
AB WO2003056329 A UPAB: 20040326
NOVELTY - A drug discovery process (M1) for identifying a ligand binding to a biological target molecule comprising constructing a signal transduction complex (SC) comprising a biological target molecule, one or more downstream effector molecules and/or an adaptor protein, contacting the ligand with the (SC), and measuring effect resulting from the (SC) relating to the biological target molecule and one or more downstream effector molecules, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) a non-endogenous biological target molecule selected from the group comprising:

(a) an adaptor modified biological molecule comprising an adaptor protein having one or more domains;

(b) a domain modified biological target molecule comprising domains originated from an adaptor protein; and

(c) a recognition motif modified biological target molecule comprising recognition motifs.

(2) a non-endogenous adaptor protein, which is a recognition motif modified adaptor protein comprising recognition motifs;

(3) an isolated nucleic acid molecule comprising a polynucleotide sequence encoding the non-endogenous biological target molecule;

(4) an isolated nucleic acid molecule comprising a polynucleotide sequence encoding the non-endogenous adaptor protein;

(5) an isolated nucleic acid molecule comprising a polynucleotide sequence encoding the non-endogenous downstream effector molecule.

(6) a non-endogenous downstream effector molecule comprising;

(a) an adaptor modified downstream effector molecule comprising an adaptor protein comprising one or more domains;

(b) a domain modified downstream effector molecule comprising one or more domains originated from an adaptor protein; and

(c) a recognition motif modified downstream effector comprising one or more recognition motifs.

(7) a non-endogenous signal transduction complex;

(8) a **cell** comprising the non-endogenous signal transduction complex;

(9) producing a signal transduction complex comprising a synthetic, semi-synthetic, and/or recombinant method;

(10) a recombinant DNA expression vector comprising the nucleic acid molecule;

(11) a biosensor chip for use in the drug discovery process and/or in the screening assay comprising the signal transduction complex;

(12) an **array** comprising a multiplicity of individual spots at least one of which comprises a signal transduction complex; and

(13) a recombinant method of producing the signal transduction complex.

USE - The drug discovery process is useful for identifying a ligand that is able to bind to a biological target molecule (claimed) and is especially useful in a drug discovery process.

Dwg.0/10

L4 ANSWER 4 OF 10 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

ACCESSION NUMBER: 2003-402510 [38] WPIDS

DOC. NO. NON-CPI: N2003-321111

DOC. NO. CPI: C2003-107010

TITLE: Capacitor structure fabrication method e.g. for dynamic random access memory, involves forming **bilayer** barrier comprising metal layer and metal nitride layer upon upper capacitor plate.

DERWENT CLASS: L03 U11 U12 U14

INVENTOR(S): CHANG, C S; SHIH, W; WU, T B

PATENT ASSIGNEE(S): (TASE-N) TAIWAN SEMICONDUCTOR MFG CO LTD

COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 2003047770	A1	20030313	(200338)*		9
US 6559497	B2	20030506	(200338)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 2003047770	A1	US 2001-947786	20010906
US 6559497	B2	US 2001-947786	20010906

PRIORITY APPLN. INFO: US 2001-947786 20010906
AN 2003-402510 [38] WPIDS
AB US2003047770 A UPAB: 20030616
NOVELTY - A **bilayer** barrier (32) is formed on an upper capacitor plate (30) of the capacitor structure. The barrier comprises a metal layer (32b) formed over a metal nitride layer (32a).
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for capacitor structure.
USE - For fabricating capacitor structure (claimed) used in e.g. dynamic random access memory (DRAM), ceramic substrate, solar **cell**, sensor image **array**, display image **array**.
ADVANTAGE - The conductor barrier provides attenuated inter diffusion and enhanced **adhesion** of the capacitor plate with respect to adjacent layer within microelectronic fabrication.
DESCRIPTION OF DRAWING(S) - The figure shows a cross-sectional diagram of the capacitor within the DRAM **cell**.
upper capacitor plate 30
bilayer barrier 32
metal nitride layer 32a
metal layer 32b
Dwg.4/4

L4 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:630976 CAPLUS
TITLE: Lectin and neurotoxin interactions with glycolipid membranes as monitored by liposome leakage studies
AUTHOR(S): Huber, Tina A.; Slade, Andrea; Last, Julie A.; Bondurant, Bruce; Sasaki, Darryl Y.
CORPORATE SOURCE: Biomolecular Materials and Interface Science Department, Sandia National Laboratories, Albuquerque, NM, 87185, USA
SOURCE: Abstracts of Papers, 226th ACS National Meeting, New York, NY, United States, September 7-11, 2003 (2003), COLL-173. American Chemical Society: Washington, D. C.
CODEN: 69EKY9
DOCUMENT TYPE: Conference; Meeting Abstract
LANGUAGE: English
AB Protein-carbohydrate recognition on a lipid membrane surface directs an **array** of important **cellular** interactions, such as **cell adhesion**, immune response, and neurotoxin binding. We have previously investigated the interaction of lectin and toxin binding to two- to three-component **bilayer** membranes using fluorescence spectroscopy and AFM imaging. However, in these studies little was revealed toward the extent of membrane disruption caused by the complexation event and subsequent protein invagination or denaturation in the membrane. We will present data on liposome leakage studies of glycolipid-containing membranes as they interact with lectins (i.e., Con A, Dolichos biflorus) and neurotoxins (i.e., tetanus, botulinum). The data enables an evaluation of the conditions (e.g., pH, temperature, membrane composition) and efficiency with which these proteins cause membrane instability and/or pore formation. Sandia is a multiprogram laboratory operated by Sandia Corporation, a Lockheed Martin Company, for the U.S. Department of Energy under Contract DE-AC04-94AL85000.

L4 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1
ACCESSION NUMBER: 2002:332380 CAPLUS
DOCUMENT NUMBER: 136:336194
TITLE: Gene expression analysis in microorganism using

adhesion to lipid **bilayer**
INVENTOR(S): Knutton, Stuart; Frankel, Gad Meir
PATENT ASSIGNEE(S): Imperial College Innovations Limited, UK
SOURCE: PCT Int. Appl., 81 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002034952	A2	20020502	WO 2001-GB4684	20011022
WO 2002034952	A3	20030424		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2001095767	A5	20020506	AU 2001-95767	20011022
EP 1352082	A2	20031015	EP 2001-976499	20011022
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

PRIORITY APPLN. INFO.: GB 2000-26459 A 20001028
WO 2001-GB4684 W 20011022

AB A method of analyzing gene expression occurring in a microorganism before, during or after contact with or **adhesion** of the microorganism to a lipid **bilayer**, comprising the step of exposing the microorganism to a lipid **bilayer**, wherein the liquid **bilayer** is substantially not associated with protein or RNA synthetic machinery is disclosed. The lipid **bilayer** may be a red blood **cell** membrane, for example in the form of intact red blood **cells**. The red blood **cells** may be immobilized as a monolayer. The microorganism may be an enteropathogenic or enterohemorrhagic E. coli. A DNA or protein **microarray** may be used in analyzing gene expression. The authors show that the interaction between an attaching microorganism, for example a pathogenic organism, and a lipid **bilayer** which is substantially not associated with protein or RNA synthetic machinery, may be used as a model in identifying changes in levels of **cell** components, particularly changes in protein or RNA expression, in the attaching organism associated with early interaction between the organism and a host **cell**. The identified components, for example proteins, may be targets for vaccines and/or compds. that may modulate, preferably inhibit, the interaction between the attaching organism and a host **cell**. The identified components may be useful in relation to diagnosis, for example in identification of the microorganism(s) involved in an infection.

L4 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 2
ACCESSION NUMBER: 2002:833415 CAPLUS
DOCUMENT NUMBER: 137:322250
TITLE: Modulation of **cellular adhesion** with lipid membrane micro-arrays
INVENTOR(S): Groves, John T.; Mahal, Lara K.; Bertozzi, Carolyn R.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 12 pp.
CODEN: USXXCO

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2002160505	A1	20021031	US 2002-76727		20020213
PRIORITY APPLN. INFO.:			US 2001-269625P	P	20010216
			US 2001-296952P	P	20010608

AB A method and device for controlled **cell adhesion** is provided. The device comprises lipid **bilayer** membranes arranged into discrete areas in a micro-**array**. They are useful for screening and modulation of living **cell adhesion** and growth on a solid substrate. The lipid **bilayer** membranes are doped with various lipids and/or proteins to modulate the adherence of the **cells** being used in the device. Using a **microarray** device, **cell adhesion** was characterized on egg-phosphatidylcholine (egg-PC) membranes doped with a variety of neg. and pos. charged lipids. In all cases, phosphatidylserine containing membranes promoted **cell adhesion** of HeLa **cells** while other compns. effectively blocked **cell adhesion**.

L4 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 3
ACCESSION NUMBER: 2001:851419 CAPLUS
DOCUMENT NUMBER: 135:368900
TITLE: Lipid **bilayer array** methods and devices
INVENTOR(S): Kam, Lance; Boxer, Steven G.
PATENT ASSIGNEE(S): The Board of Trustees of the Leland Stanford Junior University, USA
SOURCE: PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2001088182	A2	20011122	WO 2001-US16168		20010517
WO 2001088182	A3	20020516			
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
CA 2408351	AA	20011122	CA 2001-2408351		20010517
US 2002009807	A1	20020124	US 2001-860124		20010517
EP 1287351	A2	20030305	EP 2001-939134		20010517
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR					
JP 2003533211	T2	20031111	JP 2001-584564		20010517
PRIORITY APPLN. INFO.:			US 2000-205604P	P	20000518
			WO 2001-US16168	W	20010517

AB The invention provides useful devices and methods for both studying interfaces between **cell** membranes, and integrating living **cells** with synthetic surfaces exhibiting complex lateral composition,

organization and fluidity. Described is the fabrication of controlled interfaces between **cells** and synthetic supported lipid **bilayer** membranes.

L4 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:208507 CAPLUS
DOCUMENT NUMBER: 134:234000
TITLE: Spatially-addressed lipid **bilayer** arrays and lipid bilayers with addressable confined aqueous compartments
INVENTOR(S): Cremer, Paul S.; Simanek, Eric E.; Yang, Tinglu
PATENT ASSIGNEE(S): The Texas A & M University System, USA
SOURCE: PCT Int. Appl., 87 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001020330	A1	20010322	WO 2000-US25627	20000918
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2385807	AA	20010322	CA 2000-2385807	20000918
EP 1218745	A1	20020703	EP 2000-963609	20000918
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				

PRIORITY APPLN. INFO.:
US 1999-154576P P 19990917
US 2000-564708 A 20000504
WO 2000-US25627 W 20000918

AB Disclosed are spatially-addressed arrays of discreet fluid lipid bilayers prepared by flexible patterning methods that facilitate the compartmentalization of lipid membranes and aqueous solns. disposed thereon into discreet, spatially-addressable, **microarray** partitions, onto specific and discreet locations of a substantially planar solid support. This process can either be used in parallel or sequentially to pattern thousands of distinct membranes on a single "biochip", and to assay pluralities of selected analyte components contacted with the discreet lipid **bilayer** compartments for one or more target mols. Also provided are biochip **microarray** systems and methods for their production that comprise arrays of confined aqueous compartments disposed upon such compartmentalized lipid bilayers. The aqueous compartments are independently addressable, thereby facilitating reagent delivery, reagent extraction, anal. probe and high-throughput analyte screening methods.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:900239 CAPLUS
DOCUMENT NUMBER: 136:2531
TITLE: Rough charged solid phase for attachment of biomolecules
INVENTOR(S): Laguitton, Bruno
PATENT ASSIGNEE(S): Corning Incorporated, USA

SOURCE: Eur. Pat. Appl., 19 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1162459	A1	20011212	EP 2000-401599	20000607

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.: EP 2000-401599 20000607

AB This invention related to a coated substrate and methods of making the coated substrate. Specifically, the invention is a substrate having a charged film for use in the optical, elec. and biol. fields, and a method for making the substrate having a charged film. A first layer of polyelectrolyte having an opposite charge to the substrate surface charge adheres to the substrates electrostatically. Addnl. polyelectrolyte layers can be placed on top of the first polyelectrolyte layer as long as addnl. layers have an opposite charge from the charge of the prior layer. In order to achieve a desired roughness each successive layer is deposited in different solns. of an alternatively charged polyelectrolyte mixed with salt. The polyelectrolyte layers are composed to achieve a precise surface roughness that optimize the **adhesion** of a binding entity and facilitates the hybridization of DNA in performing DNA hybridization assays. The final polyelectrolyte layer is aminated or activated for non covalent bonding entity.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
=> e groves john?/au
E1          245     GROVES JOHN T/AU
E2            1     GROVES JOHN T III/AU
E3            0 --> GROVES JOHN?/AU
E4           31     GROVES JONATHAN D/AU
E5            2     GROVES JOSEPH V/AU
E6            1     GROVES JOSHUA R/AU
E7            1     GROVES JR F/AU
E8            4     GROVES JR F R/AU
E9            2     GROVES JR I D/AU
E10           3     GROVES JR R H/AU
E11           1     GROVES JULIAN MCALLISTER/AU
E12          20     GROVES K/AU

=> e1 or e2
L6          246 "GROVES JOHN T"/AU OR "GROVES JOHN T III"/AU

=> cell? and adhes? and l6
   4 FILES SEARCHED...
L7            1 CELL? AND ADHES? AND L6

=> d ibib abs l7

L7   ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:        2002:833415  CAPLUS
DOCUMENT NUMBER:         137:322250
TITLE:                   Modulation of cellular adhesion
                         with lipid membrane micro-arrays
INVENTOR(S):             Groves, John T.; Mahal, Lara K.; Bertozzi,
                         Carolyn R.
```

PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 12 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2002160505	A1	20021031	US 2002-76727		20020213
PRIORITY APPLN. INFO.:			US 2001-269625P	P	20010216
			US 2001-296952P	P	20010608

AB A method and device for controlled **cell adhesion** is provided. The device comprises lipid bilayer membranes arranged into discrete areas in a micro-array. They are useful for screening and modulation of living **cell adhesion** and growth on a solid substrate. The lipid bilayer membranes are doped with various lipids and/or proteins to modulate the adherence of the **cells** being used in the device. Using a microarray device, **cell adhesion** was characterized on egg-phosphatidylcholine (egg-PC) membranes doped with a variety of neg. and pos. charged lipids. In all cases, phosphatidylserine containing membranes promoted **cell adhesion** of HeLa **cells** while other compns. effectively blocked **cell adhesion**.

=> cell and l6
L8 20 CELL AND L6

=> dup rem l8
PROCESSING COMPLETED FOR L8
L9 14 DUP REM L8 (6 DUPLICATES REMOVED)

=> t ti l9 1-14

L9 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
TI Membrane-based assays using surface detector array devices suitable for use with a biosensor

L9 ANSWER 2 OF 14 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation. on STN
TI The bioinorganic chemistry of iron in oxygenases and supramolecular assemblies.

L9 ANSWER 3 OF 14 MEDLINE on STN DUPLICATE 1
TI Xylene monooxygenase, a membrane-spanning non-heme diiron enzyme that hydroxylates hydrocarbons via a substrate radical intermediate.

L9 ANSWER 4 OF 14 MEDLINE on STN DUPLICATE 2
TI Enhanced peroxynitrite decomposition protects against experimental obliterative bronchiolitis.

L9 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
TI Modulation of cellular adhesion with lipid membrane micro-arrays

L9 ANSWER 6 OF 14 MEDLINE on STN DUPLICATE 3
TI Membrane affinity of the amphiphilic marinobactin siderophores.

L9 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
TI Macrocyclic metal comples as peroxynitrite decomposition catalysts, and therapeutic methods

L9 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
TI Peroxynitrite: reactive, invasive and enigmatic

L9 ANSWER 9 OF 14 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation. on STN
TI Peroxynitrite rapidly permeates phospholipid membranes.

L9 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
TI Peroxynitrite and MnTMPyP mediated catalytic cleavage of DNA: Evidence for a metal-oxo intermediate and its implications.

L9 ANSWER 11 OF 14 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation. on STN
TI Biomimetic multi-heme self-assembly in phospholipid vesicles.

L9 ANSWER 12 OF 14 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation. on STN
TI Directed multi-heme self-assembly and electron transfer in a model membrane.

L9 ANSWER 13 OF 14 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation. on STN
TI Tetraphilin: A four-helix proton channel built on a tetraphenylporphyrin framework.

L9 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
TI Phthalate ester toxicity in human **cell** cultures

=> d ibib abs l9 1,6

L9 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:219937 CAPLUS
DOCUMENT NUMBER: 140:249707
TITLE: Membrane-based assays using surface detector array devices suitable for use with a biosensor
INVENTOR(S): Yamazaki, Miki; Schafer, Robert J.; Ulman, Morrison; **Groves, John T.**
PATENT ASSIGNEE(S): Synamem Corporation, A California Corporation, USA
SOURCE: U.S. Pat. Appl. Publ., 26 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004053337	A1	20040318	US 2003-661790	20030911
WO 2004025262	A2	20040325	WO 2003-US28762	20030911
WO 2004025262	A3	20040617		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2002-410173P P 20020911

AB Membrane-based assays using surface detector array devices suitable for use with a biosensor are disclosed. The device is formed of a substrate having a surface defining a plurality of distinct bilayer-compatible surface regions separated by one or more bilayer barrier regions. The bilayer-compatible surface regions carry on them, separated by an aqueous film, supported fluid bilayers. The bilayers may contain selected receptors or biomols. A bulk aqueous phase covers the bilayers on the substrate surface. Arrays may be engineered to display natural membrane materials in a native fluid bilayer configuration, permitting high-throughput discovery of drugs that target and affect membrane components. The membrane-based assays detect binding events by monitoring binding-induced changes in one or more phys. properties of fluid bilayers. Vesicles with increasing concns. of ganglioside GM1 (0 %, 0.01 %, 0.05 %, 0.15 %, 0.25 %, 0.5 %, 1 %, 2 %) with 1 % NBD-PG in egg PC were robotically dispensed with Cartesian MicroSysTM Model 4100-2SQ. Direct dispensing methods were employed to deposit (10 nl) each of the 8 vesicle suspensions into pre-patterned 250+250 μm2 corrals in a row. Vesicle fusion occurs within seconds of deposition, forming fluid supported membranes that continuously fill each corral. Membrane fluidity was monitored by fluorescence recovery after photobleaching (FRAP) of the fluorescent probe lipid (NBD-PG). Eight identical chips were exposed to 8 increasing concns. of Cholera Toxin B (0 nM, 5 nM, 10 nM, 20 nM, 30 nM, 50 nM, 100 nM, 300 nM). Curve fitting to one site binding, Y=Bmax*X/(Kd+X), (Prism 3.0, GraphPad Software Inc., San Diego, Calif.) yielded an average binding constant of 13.2 nM at 0.25 % GM1 from 3 independently performed expts.

L9 ANSWER 6 OF 14 MEDLINE on STN DUPLICATE 3

ACCESSION NUMBER: 2002659925 MEDLINE
DOCUMENT NUMBER: PubMed ID: 12418892
TITLE: Membrane affinity of the amphiphilic marinobactin siderophores.
AUTHOR: Xu Guofeng; Martinez Jennifer S; **Groves John T**; Butler Alison
CORPORATE SOURCE: Department of Chemistry, Princeton University, New Jersey 08544, USA.
CONTRACT NUMBER: GM38130 (NIGMS)
SOURCE: Journal of the American Chemical Society, (2002 Nov 13) 124 (45) 13408-15.
Journal code: 7503056. ISSN: 0002-7863.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200302
ENTRY DATE: Entered STN: 20021107
Last Updated on STN: 20030206
Entered Medline: 20030205

AB Marinobactins are a class of newly discovered marine bacterial siderophores with a unique amphiphilic structure, suggesting that their functions relate to interactions with **cell** membranes. Here we use small and large unilamellar L-alpha-dimyristoylphosphatidylcholine vesicles (SUVs and LUVs) as model membranes to examine the thermodynamics and kinetics of the membrane binding of marinobactins, particularly marinobactin E (apo-M(E)) and its iron(III) complex, Fe-M(E). Siderophore-membrane interactions are characterized by NMR line broadening, stopped-flow spectrophotometry, fluorescence quenching, and ultracentrifugation. It is determined that apo-M(E) has a strong affinity for lipid membranes with molar fraction partition coefficients K(x)()(apo)(-)(M)E = 6.3 x 10(5) for SUVs and 3.6 x 10(5) for LUVs. This membrane association is shown to cause only a 2-fold decrease in the rate

of iron(III) binding by apo-M(E). However, upon the formation of the iron(III) complex Fe-M(E), the membrane affinity of the siderophore decreased substantially (K(x)()(Fe)(-)(M)E = 1.3 x 10(4) for SUVs and 9.6 x 10(3) for LUVs). The kinetics of membrane binding and dissociation by Fe-M(E) were also determined (k(on)(Fe)(-)(M)E = 1.01 M(-)(1) s(-)(1); k(off)(Fe)(-)(M)E = 4.4 x 10(-)(3) s(-)(1)). The suite of marinobactins with different fatty acid chain lengths and degrees of chain unsaturation showed a range of membrane affinities (5.8 x 10(3) to 36 M(-)(1)). The affinity that marinobactins exhibit for membranes and the changes observed upon iron binding could provide unique biological advantages in a receptor-assisted iron acquisition process in which loss of the iron-free siderophore by diffusion is limited by the strong association with the lipid phase.

```
=> e mahal lara?/au
E1          20     MAHAL L K/AU
E2          38     MAHAL LARA K/AU
E3           0 --> MAHAL LARA?/AU
E4           8     MAHAL M/AU
E5           1     MAHAL M K/AU
E6           4     MAHAL M R/AU
E7          42     MAHAL M S/AU
E8           2     MAHAL MICHELE K/AU
E9           2     MAHAL MICHELLE/AU
E10          1     MAHAL MOHAN SINGH/AU
E11          1     MAHAL MONA/AU
E12          1     MAHAL N/AU

=> e1 or e2
L10         58 "MAHAL L K"/AU OR "MAHAL LARA K"/AU

=> l10 and cell
L11         52 L10 AND CELL

=> l10 and ?array
L12          6 L10 AND ?ARRAY

=> dup rem l12
PROCESSING COMPLETED FOR L12
L13           5 DUP REM L12 (1 DUPLICATE REMOVED)

=> t ti l13 1-5

L13  ANSWER 1 OF 5     MEDLINE on STN
TI   Catching bacteria with sugar.

L13  ANSWER 2 OF 5  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Catching Bacteria with Sugar

L13  ANSWER 3 OF 5  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Development of a lectin-based microarray for profiling cell
     surface glycosylation

L13  ANSWER 4 OF 5  CAPLUS  COPYRIGHT 2005 ACS on STN  DUPLICATE 1
TI   Modulation of cellular adhesion with lipid membrane micro-arrays

L13  ANSWER 5 OF 5  BIOSIS  COPYRIGHT (c) 2005 The Thomson Corporation.  on STN
TI   Control of cell adhesion and growth with membrane micro-arrays.


=> d ibib abs l13 3, 5
```

L13 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:658538 CAPLUS
TITLE: Development of a lectin-based **microarray** for profiling cell surface glycosylation
AUTHOR(S): **Mahal, Lara K.**; Pilobello, Kanoelani
CORPORATE SOURCE: Department of Chemistry and Biochemistry, University of Texas at Austin, Austin, TX, 78712, USA
SOURCE: Abstracts of Papers, 228th ACS National Meeting, Philadelphia, PA, United States, August 22-26, 2004 (2004), ORGN-273. American Chemical Society: Washington, D. C.
CODEN: 69FTZ8
DOCUMENT TYPE: Conference; Meeting Abstract
LANGUAGE: English
AB Cell surface oligosaccharides are known to play a crucial role in a diverse **array** of biol. processes including cell adhesion, inflammation, neuronal plasticity and cell-pathogen interactions. Despite their importance, systematic study of these carbohydrate epitopes is complicated by their heterogeneity and diversity. In addition, the techniques available for characterization, such as histol., mass spectrometry and chromatog., tend to be difficult and time-consuming. The advent of **microarray** technol. has opened the door for rapid characterization of complex mixts. of proteins or DNA. This paper describes the development of a lectin-based **microarray** for the profiling of cellular carbohydrates (glycomics) and its applications.

L13 ANSWER 5 OF 5 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation. on STN
ACCESSION NUMBER: 2001:141283 BIOSIS
DOCUMENT NUMBER: PREV200100141283
TITLE: Control of cell adhesion and growth with membrane micro-arrays.
AUTHOR(S): Groves, Jay T. [Reprint author]; **Mahal, Lara K.** [Reprint author]; Bertozzi, Carolyn R. [Reprint author]
CORPORATE SOURCE: UC Berkeley, Calvin 206, Berkeley, CA, 94720, USA
SOURCE: Biophysical Journal, (January, 2001) Vol. 80, No. 1 Part 2, pp. 144a. print.
Meeting Info.: 45th Annual Meeting of the Biophysical Society. Boston, Massachusetts, USA. February 17-21, 2001. Biophysical Society.
CODEN: BIOJAU. ISSN: 0006-3495.
DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
Conference; (Meeting Poster)
LANGUAGE: English
ENTRY DATE: Entered STN: 21 Mar 2001
Last Updated on STN: 15 Feb 2002

=> e bertozzi c?/au
E1 1 BERTOZZI C C/AU
E2 160 BERTOZZI C R/AU
E3 0 --> BERTOZZI C?/AU
E4 3 BERTOZZI CAROLINE/AU
E5 1 BERTOZZI CAROLY R/AU
E6 26 BERTOZZI CAROLYN/AU
E7 376 BERTOZZI CAROLYN R/AU
E8 1 BERTOZZI CAROLYN RUTH/AU
E9 1 BERTOZZI CLAUDIA/AU
E10 18 BERTOZZI D/AU
E11 15 BERTOZZI E/AU
E12 14 BERTOZZI E R/AU

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L14        565 "BERTOZZI C C"/AU OR "BERTOZZI C R"/AU OR "BERTOZZI CAROLINE"/AU
               OR "BERTOZZI CAROLYN"/AU OR "BERTOZZI CAROLYN R"/AU

=> s l14 and ?array
L15         18 L14 AND ?ARRAY

=> dup rem l15
PROCESSING COMPLETED FOR L15
L16          9 DUP REM L15 (9 DUPLICATES REMOVED)

=> t ti l16 1-9

L16  ANSWER 1 OF 9  EMBASE  COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.
     on STN
TI   Global gene expression of cells attached to a tissue engineering scaffold.

L16  ANSWER 2 OF 9  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Immobilization of glycoproteins by glycosyl oxidation and reaction with
     aminooxy-functionalized compounds

L16  ANSWER 3 OF 9     MEDLINE on STN                    DUPLICATE 1
TI   MmpL8 is required for sulfolipid-1 biosynthesis and Mycobacterium
     tuberculosis virulence.

L16  ANSWER 4 OF 9  CAPLUS  COPYRIGHT 2005 ACS on STN  DUPLICATE 2
TI   Modulation of cellular adhesion with lipid membrane micro-arrays

L16  ANSWER 5 OF 9     MEDLINE on STN                    DUPLICATE 3
TI   Polymerized liposome assemblies: bifunctional macromolecular selectin
     inhibitors mimicking physiological selectin ligands.

L16  ANSWER 6 OF 9  BIOSIS  COPYRIGHT (c) 2005 The Thomson Corporation.  on STN
TI   Control of cell adhesion and growth with membrane micro-arrays.

L16  ANSWER 7 OF 9  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Novel carbohydrate biosynthetic pathway for metabolic cell surface
     engineering: Synthesis and evaluation of 2-ketosugars.

L16  ANSWER 8 OF 9  CAPLUS  COPYRIGHT 2005 ACS on STN  DUPLICATE 4
TI   Sulfotransferases as targets for therapeutic intervention

L16  ANSWER 9 OF 9     MEDLINE on STN                    DUPLICATE 5
TI   The selectins and their ligands.


=> d ibib abs l16 1,2,5, 7, 8, 9

L16  ANSWER 1 OF 9  EMBASE  COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.
     on STN
ACCESSION NUMBER:   2004231524  EMBASE
TITLE:              Global gene expression of cells attached to a tissue
                    engineering scaffold.
AUTHOR:             Klapperich C.M.; Bertozzi C.R.
CORPORATE SOURCE:   C.M. Klapperich, Boston University, Depts. of Mfg. and
                    Biomed. Eng., 44 Cummington St. 520B, Boston, MA 02215,
                    United States. catherin@bu.edu
SOURCE:             Biomaterials, (2004) 25/25 (5631-5641).
                    Refs: 56
                    ISSN: 0142-9612  CODEN: BIMADU
PUBLISHER IDENT.:   S 0142-9612(04)00059-6
```

COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 022 Human Genetics
027 Biophysics, Bioengineering and Medical Instrumentation
029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English

AB A goal of tissue engineering is to produce a scaffold material that will guide cells to differentiate and regenerate functional replacement tissue at the site of injury. Little is known about how cells respond on a molecular level to tissue engineering scaffold materials. In this work we used oligonucleotide microarrays to interrogate gene expression profiles associated with cell-biomaterial interactions. We seeded collagen-glycosaminoglycan meshes, a widely used tissue engineering scaffold material, with human IMR-90 fibroblasts and compared transcript levels with control cells grown on tissue culture polystyrene. Genes involved in cell signaling, extracellular matrix remodeling, inflammation, angiogenesis and hypoxia were all activated in cells on the collagen-GAG mesh. Understanding the impact of a scaffold on attached cells will facilitate the design of improved tissue engineering materials. .COPYRGT. 2004 Elsevier Ltd. All rights reserved.

L16 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:931413 CAPLUS
DOCUMENT NUMBER: 140:2578
TITLE: Immobilization of glycoproteins by glycosyl oxidation and reaction with aminooxy-functionalized compounds
INVENTOR(S): Peluso, Paul; **Bertozzi, Carolyn**
PATENT ASSIGNEE(S): Zyomyx, Inc., USA
SOURCE: PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003097699	A1	20031127	WO 2003-US15416	20030515
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: US 2002-380923P P 20020515

AB Methods and compns. for the immobilization of glycoproteins are presented herein. In addition, the present invention provides arrays of immobilized glycoproteins. The methods of immobilizing glycoproteins include oxidation of the glycosyl moiety and the reaction of this moiety with an aminooxy functionality. IgG was oxidized with sodium meta periodate and then reacted with N-(aminooxyacetyl)-N'-(D-biotinoyl)hydrazine trifluoroacetic acid salt. This reaction product was immobilized on streptavidin-coated biotinylated self-assembled monolayers formed on a gold-coated glass surface.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 5 OF 9 MEDLINE on STN DUPLICATE 3
ACCESSION NUMBER: 2001293763 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11352731
TITLE: Polymerized liposome assemblies: bifunctional macromolecular selectin inhibitors mimicking physiological selectin ligands.
AUTHOR: Bruehl R E; Dasgupta F; Katsumoto T R; Tan J H; **Bertozzi C R**; Spevak W; Ahn D J; Rosen S D; Nagy J O
CORPORATE SOURCE: Department of Anatomy and Program in Biomedical Sciences, University of California, San Francisco, California 94143, USA.
CONTRACT NUMBER: R4 AI 43789A (NIAID)
SOURCE: Biochemistry, (2001 May 22) 40 (20) 5964-74.
Journal code: 0370623. ISSN: 0006-2960.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200108
ENTRY DATE: Entered STN: 20010820
Last Updated on STN: 20010820
Entered Medline: 20010816

AB Monomeric sialyl Lewis(X) (sLe(x)) and sLe(x)-like oligosaccharides are minimal structures capable of supporting selectin binding in vitro. However, their weak binding interactions do not correlate with the high-affinity binding interactions witnessed in vivo. The polyvalent display of carbohydrate groups found on cell surface glycoprotein structures may contribute to the enhanced binding strength of selectin-mediated adhesion. Detailed biochemical analyses of physiological selectin ligands have revealed a complicated composition of molecules that bind to the selectins in vivo and suggest that there are other requirements for tight binding beyond simple carbohydrate multimerization. In an effort to mimic the high-affinity binding, polyvalent scaffolds that contain multicomponent displays of selectin-binding ligands have been synthesized. Here, we demonstrate that the presentation of additional anionic functional groups in the form of sulfate esters, on a polymerized liposome surface containing a multimeric **array** of sLe(x)-like oligosaccharides, generates a highly potent, bifunctional macromolecular assembly. This assembly inhibits L-, E-, and P-selectin binding to GlyCAM-1, a physiological ligand better than sLe(x)-like liposomes without additional anionic charge. These multivalent arrays are 4 orders of magnitude better than the monovalent carbohydrate. Liposomes displaying 3'-sulfo Lewis(X)-like oligosaccharides, on the other hand, show slight loss of binding with introduction of additional anionic functional groups for E- and P-selectin and negligible change for L-selectin. The ability to rapidly and systematically vary the composition of these assemblies is a distinguishing feature of this methodology and may be applied to the study of other systems where composite binding determinants are important for high-affinity binding.

L16 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:332813 CAPLUS
TITLE: Novel carbohydrate biosynthetic pathway for metabolic cell surface engineering: Synthesis and evaluation of 2-ketosugars.
AUTHOR(S): Hang, Howard C.; **Bertozzi, Carolyn R.**
CORPORATE SOURCE: Department of Chemistry, University of California, Berkeley, CA, 94720, USA
SOURCE: Book of Abstracts, 219th ACS National Meeting, San

Francisco, CA, March 26-30, 2000 (2000), ORGN-686.
American Chemical Society: Washington, D. C.
CODEN: 69CLAC
DOCUMENT TYPE: Conference; Meeting Abstract
LANGUAGE: English
AB Carbohydrates mediate a diverse **array** of events on the cell surface that govern the behavior of cells such as cell-cell adhesion and virus-host cell binding. Therefore, the ability to engineer cells with chemical well-defined oligosaccarides would facilitate the study of cell surface recognition events. Our group has recently exploited the promiscuity of sialic acid biosynthetic machinery to introduce a reactive organic functional group such as the ketone on to the cell surface (Mahal, L. M.; Yarema, K. J; Bertozzi, C. R. Science 1997, 276, 1125.). In order to expand the scope of biosynthethic pathways amendable metabolic cell surface engineering, a series of 2-ketosugars that are the C-2 carbon isosteres of 2-N-acetamido sugars were synthesized and evaluated for their incorporation into cellular glycoconjugates. The 2-keto isostere of GalNAc, GalKeto (1) was shown to be metabolized by CHO cells and presented in cell surface glycoconjugates. This provides a new avenue for metabolic cell surface engineering.

L16 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 4
ACCESSION NUMBER: 2000:728186 CAPLUS
DOCUMENT NUMBER: 134:12992
TITLE: Sulfotransferases as targets for therapeutic intervention
AUTHOR(S): Armstrong, Joshua I.; **Bertozzi, Carolyn R.**
CORPORATE SOURCE: Departments of Chemistry, University of California - Berkeley, Berkeley, CA, 94720, USA
SOURCE: Current Opinion in Drug Discovery & Development (2000), 3(5), 502-515
CODEN: CODDFF; ISSN: 1367-6733
PUBLISHER: PharmaPress Ltd.
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
AB A review with 102 refs. Sulfated biomols. regulate a diverse **array** of normal and pathol. cellular communication events. The participation of these bioconjugates in a variety of disease states has sparked interest in the enzyme class that installs the sulfate esters: the sulfotransferases. Recent advances in the cloning and characterization of sulfotransferase enzymes and our understanding of the role of sulfated biomols. in disease states have prompted the search for specific sulfotransferase inhibitors. Evidence for the participation of sulfated carbohydrates and proteins in acute and chronic inflammation, tumor progression and microbial pathogenesis is presented herein, followed by a discussion of sulfotransferase mechanism and approaches to inhibiting sulfotransferase activity.
REFERENCE COUNT: 102 THERE ARE 102 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 9 OF 9 MEDLINE on STN DUPLICATE 5
ACCESSION NUMBER: 95134430 MEDLINE
DOCUMENT NUMBER: PubMed ID: 7530461
TITLE: The selectins and their ligands.
AUTHOR: Rosen S D; **Bertozzi C R**
CORPORATE SOURCE: Department of Anatomy, University of California, San Francisco 94143-0452.
CONTRACT NUMBER: GM23547 (NIGMS)
SOURCE: Current opinion in cell biology, (1994 Oct) 6 (5) 663-73.
Ref: 79
Journal code: 8913428. ISSN: 0955-0674.

PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199502
ENTRY DATE: Entered STN: 19950314
Last Updated on STN: 19960129
Entered Medline: 19950224

AB The selectins are a family of carbohydrate-binding proteins, or lectins, that have stimulated tremendous interest because of their involvement in a wide **array** of interactions between leukocytes and endothelial cells. Highlights of recent progress include an extension of the list of instances of selectin participation in inflammatory diseases, further definition of selectin carbohydrate specificities, and identification of their carbohydrate-based ligands.

=> d his

(FILE 'HOME' ENTERED AT 19:26:04 ON 26 JAN 2005)

FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, WPIDS' ENTERED AT 19:26:32 ON 26 JAN 2005

L1 10 BILAYER AND ?ARRAY AND (CELL? (S) ADHES?)
L2 7 DUP REM L1 (3 DUPLICATES REMOVED)
L3 13 BILAYER AND ?ARRAY AND CELL? AND ADHES?
L4 10 DUP REM L3 (3 DUPLICATES REMOVED)
L5 0 L2 NOT L4
E GROVES JOHN?/AU
L6 246 E1 OR E2
L7 1 CELL? AND ADHES? AND L6
L8 20 CELL AND L6
L9 14 DUP REM L8 (6 DUPLICATES REMOVED)
E MAHAL LARA?/AU
L10 58 E1 OR E2
L11 52 L10 AND CELL
L12 6 L10 AND ?ARRAY
L13 5 DUP REM L12 (1 DUPLICATE REMOVED)
E BERTOZZI C?/AU
L14 565 E1 OR E2 OR E4 OR E6 OR E7
L15 18 S L14 AND ?ARRAY
L16 9 DUP REM L15 (9 DUPLICATES REMOVED)

=> lipid and ?array and cell? and adhes?
4 FILES SEARCHED...
L17 195 LIPID AND ?ARRAY AND CELL? AND ADHES?

=> lipid and ?array and cell?
4 FILES SEARCHED...
L18 2094 LIPID AND ?ARRAY AND CELL?

=> dup rem l17
PROCESSING COMPLETED FOR L17
L19 110 DUP REM L17 (85 DUPLICATES REMOVED)

=> l19 and py>2001
L20 82 L19 AND PY>2001

=> l19 not l20
L21 28 L19 NOT L20

=> t ti l21 1-28

L21 ANSWER 1 OF 28 MEDLINE on STN
TI Atypical mouse cerebellar development is caused by ectopic expression of the forkhead box transcription factor HNF-3beta.

L21 ANSWER 2 OF 28 MEDLINE on STN
TI Escherichia coli Braun lipoprotein induces a lipopolysaccharide-like endotoxic response from primary human endothelial **cells**.

L21 ANSWER 3 OF 28 MEDLINE on STN
TI The role of the adapter molecule SLP-76 in platelet function.

L21 ANSWER 4 OF 28 MEDLINE on STN
TI Target genes of peroxisome proliferator-activated receptor gamma in colorectal cancer **cells**.

L21 ANSWER 5 OF 28 MEDLINE on STN
TI Delivery of bioactive peptides and proteins across oral (buccal) mucosa.

L21 ANSWER 6 OF 28 MEDLINE on STN
TI Phosphoinositide 3-kinase signalling pathways.

L21 ANSWER 7 OF 28 MEDLINE on STN
TI Profiling changes in gene expression during differentiation and maturation of monocyte-derived dendritic **cells** using both oligonucleotide microarrays and proteomics.

L21 ANSWER 8 OF 28 MEDLINE on STN
TI Active tissue factor shed from human arterial smooth muscle **cells** adheres to artificial surfaces.

L21 ANSWER 9 OF 28 MEDLINE on STN
TI Endothelial response to cardiopulmonary bypass surgery.

L21 ANSWER 10 OF 28 MEDLINE on STN
TI Recent advances in molecular genetics of cardiovascular disorders. Implications for atherosclerosis and diseases of **cellular lipid** metabolism.

L21 ANSWER 11 OF 28 MEDLINE on STN
TI Intracellular signaling pathways and the regulation of **cell adhesion**.

L21 ANSWER 12 OF 28 MEDLINE on STN
TI The human inflammatory response.

L21 ANSWER 13 OF 28 MEDLINE on STN
TI The lipooligosaccharides of pathogenic gram-negative bacteria.

L21 ANSWER 14 OF 28 MEDLINE on STN
TI **Cell** biology of atherosclerosis.

L21 ANSWER 15 OF 28 MEDLINE on STN
TI Carbohydrates and the pathogenesis of Mycoplasma pneumoniae infection and AIDS--some observations and speculations.

L21 ANSWER 16 OF 28 MEDLINE on STN
TI Oligodendrocyte-substratum **adhesion** activates the synthesis of specific **lipid** species involved in **cell** signaling.

L21 ANSWER 17 OF 28 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation. on STN
TI Reversible phosphorylation: The role of protein tyrosine phosphatases in signal transduction and disease.

L21 ANSWER 18 OF 28 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation. on STN
TI Changes in thymocyte gene expression during IL-7 induced differentiation.

L21 ANSWER 19 OF 28 CAPLUS COPYRIGHT 2005 ACS on STN
TI Transcriptional profiling reveals global defects in energy metabolism, lipoprotein, and bile acid synthesis and transport with reversal by leptin treatment in Ob/ob mouse liver

L21 ANSWER 20 OF 28 CAPLUS COPYRIGHT 2005 ACS on STN
TI Plasma lipoprotein disorders and endothelial function

L21 ANSWER 21 OF 28 CAPLUS COPYRIGHT 2005 ACS on STN
TI Potential vascular roles for lipoxins in the "stop programs" of host defense and inflammation

L21 ANSWER 22 OF 28 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
TI Hypoxia-inducible factor 1-mediated inhibition of peroxisome proliferator-activated receptor α expression during hypoxia.

L21 ANSWER 23 OF 28 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
TI [Fundamental basis of atherosclerosis disease].
DONNEES FONDAMENTALES SUR L'ATHEROSCLEROSE.

L21 ANSWER 24 OF 28 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
TI The thromboxane receptor antagonist S18886 but not Aspirin inhibits atherogenesis in apo E-deficient mice: Evidence that eicosanoids other than thromboxane contribute to atherosclerosis.

L21 ANSWER 25 OF 28 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
TI The anti-ischemic potential of angiotensin:converting enzyme inhibition: Insights from the heart outcomes prevention evaluation trial.

L21 ANSWER 26 OF 28 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
TI Bacterial modulins: A novel class of virulence factors which cause host tissue pathology by inducing cytokine synthesis.

L21 ANSWER 27 OF 28 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
TI Pathophysiology of cutaneous inflammation.

L21 ANSWER 28 OF 28 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
TI Identifying hypersensitivity in a subject by obtaining a gene expression profile of hypersensitivity associated genes and detecting a predetermined pattern of gene expression of hypersensitivity associated genes.

=> d ibib abs l21 11

L21 ANSWER 11 OF 28 MEDLINE on STN
ACCESSION NUMBER: 97326825 MEDLINE
DOCUMENT NUMBER: PubMed ID: 9183646

TITLE: Intracellular signaling pathways and the regulation of **cell adhesion**.
AUTHOR: Shimizu Y
CORPORATE SOURCE: Department of Laboratory Medicine and Pathology, University of Minnesota Medical School, USA.. shimi002@gold.tc.umn.edu
SOURCE: Human cell : official journal of Human Cell Research Society, (1996 Sep) 9 (3) 175-80. Ref: 37
Journal code: 8912329. ISSN: 0914-7470.
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, ACADEMIC)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199707
ENTRY DATE: Entered STN: 19970805
Last Updated on STN: 19970805
Entered Medline: 19970718

AB **Adhesion** molecules play an essential role in the host immune response by mediating the **adhesive** interactions that are essential for immune **cell** trafficking and activation. Integrins are one family of **adhesion** receptors that leukocytes utilize to interact with other **cells** and with components of the extracellular matrix. Since leukocytes rapidly alternate between **adhesive** and nonadhesive states, the functional activity of integrins expressed on leukocytes is carefully and precisely regulated. Resting T lymphocytes express integrin receptors, but they mediate minimal **cell adhesion**. However, activation of the T **cell** results within minutes in increased integrin functional activity that occurs without a change in the level of integrin expression on the **cell** surface. Increased integrin-mediated **adhesion** appears to be a general response of T **cells** to activation, since a diverse **array** of activation stimuli are capable of inducing this rapid increase in integrin functional activity. We have used DNA-mediated gene transfer and site-directed mutagenesis to elucidate the intracellular signaling pathways that regulate integrin-mediated **cell adhesion**. Our studies have revealed two important general themes. First, the **lipid** kinase phosphatidylinositol 3-kinase (PI 3-K) plays a role in integrin regulation mediated by many regulators of integrin function. Second, there are **cell**-specific differences in the signaling pathways that regulate integrin function. These studies illustrate the complex nature of the signaling pathways that regulate lymphocyte **adhesion**.

```
=> l18 and py>2001
L22       1229 L18 AND PY>2001

=> l18 not l22
L23        865 L18 NOT L22

=> l23 and glass
L24          8 L23 AND GLASS

=> dup rem l24
PROCESSING COMPLETED FOR L24
L25          6 DUP REM L24 (2 DUPLICATES REMOVED)

=> t ti l25 1-6

L25  ANSWER 1 OF 6  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Screening differentially expressed genes in gastric adenocarcinoma by cDNA
```

microarray

L25 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
TI Use of cDNA microarrays to analyze dioxin-induced changes in human liver gene expression

L25 ANSWER 3 OF 6 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
TI Detecting the presence or amount of docosahexaenoic acid in a sample, used for the diagnosis of neurological disorders such as Alzheimer's disease.

L25 ANSWER 4 OF 6 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
TI Simultaneous analysis of an analyte and an interferent such as thyroid stimulating hormones, vitamins, anti-mouse antibodies and rheumatoid factors in a sample, involves using a flow cytometric immunoassay.

L25 ANSWER 5 OF 6 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation. on STN
TI DEGREE OF COUPLING FOR COMPOSITE MEMBRANES STUDIES ON CHOLESTEROL LIQUID MEMBRANES.

L25 ANSWER 6 OF 6 MEDLINE on STN DUPLICATE 1
TI Absorption filtration. A tool for the measurement of ion tracer flux in native membranes and reconstituted **lipid** vesicles.

=> d ibib abs l25

L25 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:669149 CAPLUS
DOCUMENT NUMBER: 136:367277
TITLE: Screening differentially expressed genes in gastric adenocarcinoma by cDNA **microarray**
AUTHOR(S): Chen, Shaoquan; Chen, Juxiang; Shi, Jinghua; Hu, Zhiqian; Ying, Kang; Tang, Rong; Li, Yao; Fu, Wei; Xie, Yi; Mao, Yumin
CORPORATE SOURCE: Department of General Surgery, Changzheng Hospital, Second Military Medical University, Shanghai, 200003, Peop. Rep. China
SOURCE: Dier Junyi Daxue Xuebao (2001), 22(6), 523-526
CODEN: DJXUE5; ISSN: 0258-879X
PUBLISHER: Dier Junyi Daxue Xuebao Bianjibu
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB The differentially expressed genes between gastric adenocarcinoma and normal gastric mucosa were screened by using cDNA **microarray**. The PCR products of 12,800 human genes were spotted on a chemical-material-coated-**glass** plate in **array**. DNAs were fixed onto the **glass** plate. The total RNAs were isolated from the tissues, and mRNAs were purified by Oligotex. Both mRNAs from the gastric adenocarcinoma and normal gastric mucosa were reversely transcribed to the cDNAs with the incorporation of fluorescent dUTP to prepare the hybridization probes. The mixed probes were hybridized to the cDNA **microarray**. After high-stringent washing, the cDNA **microarray** was scanned for fluorescent signals and showed differences between 2 tissues. Among the 12,800 target genes, 27 genes differentially expressed in all 5 samples were identified, and 11 were up-regulated (0.086%) and 16 down-regulated (0.125%). There were 2 novel genes among the down-regulated group. The results showed that cDNA **microarray** technique was effective in screening the differentially expressed genes between gastric adenocarcinoma and normal gastric mucosa.

=> d his

(FILE 'HOME' ENTERED AT 19:26:04 ON 26 JAN 2005)

FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, WPIDS' ENTERED AT 19:26:32 ON 26 JAN 2005

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L1            10 BILAYER AND ?ARRAY AND (CELL? (S) ADHES?)
L2             7 DUP REM L1 (3 DUPLICATES REMOVED)
L3            13 BILAYER AND ?ARRAY AND CELL? AND ADHES?
L4            10 DUP REM L3 (3 DUPLICATES REMOVED)
L5             0 L2 NOT L4
                 E GROVES JOHN?/AU
L6           246 E1 OR E2
L7             1 CELL? AND ADHES? AND L6
L8            20 CELL AND L6
L9            14 DUP REM L8 (6 DUPLICATES REMOVED)
                 E MAHAL LARA?/AU
L10           58 E1 OR E2
L11           52 L10 AND CELL
L12            6 L10 AND ?ARRAY
L13            5 DUP REM L12 (1 DUPLICATE REMOVED)
                 E BERTOZZI C?/AU
L14          565 E1 OR E2 OR E4 OR E6 OR E7
L15           18 S L14 AND ?ARRAY
L16            9 DUP REM L15 (9 DUPLICATES REMOVED)
L17          195 LIPID AND ?ARRAY AND CELL? AND ADHES?
L18         2094 LIPID AND ?ARRAY AND CELL?
L19          110 DUP REM L17 (85 DUPLICATES REMOVED)
L20           82 L19 AND PY>2001
L21           28 L19 NOT L20
L22         1229 L18 AND PY>2001
L23          865 L18 NOT L22
L24            8 L23 AND GLASS
L25            6 DUP REM L24 (2 DUPLICATES REMOVED)

=> logoff y
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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	195.81	196.02

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-10.95	-10.95

STN INTERNATIONAL LOGOFF AT 19:54:12 ON 26 JAN 2005